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Oregon Agricultural College

Experiment Station

Official Testing of Dairy Cattle in Oregon

By
H. N. COLMAN
Superintendent of Official Testing

CORVALLIS, OREGON

The regular bulletins of the Station are sent free to the residents of Oregon who request them.

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Official Testing of Dairy Cattle in Oregon

SCOPE OF OFFICIAL TESTING

INTRODUCTION

Oregon holds a unique place in the matter of official records in milk and butter-fat production for dairy cattle. While the high production happens to be with one breed, yet the records for the other dairy breeds are of excellent quality, and undoubtedly the time is not far distant when the other breeds in Oregon will be heard from nationally as class leaders. Although Oregon holds the foreground in Jersey records, it should be noted that, including Washington, the Pacific Northwest holds more World and high records for all breeds combined than any other section of the country. In fact the entire Pacific Coast region is noted for its high-record animals and herds. At the date of publication of this circular, Oregon is credited with holding the following Jersey honors:

1. Six of the possible eight World records in Classes A and AA.
2. Six of the possible eight World records in Class AAA.
3. Twelve of the twenty-eight Gold Medal Bulls.
4. Twenty of the forty-nine Silver Medal Bulls.
5. One of the two Medal of Merit Bulls.
6. Seventeen of the forty-nine Medal of Merit Cows.
7. One of the two Jerseys producing over 1100 pounds of butter-fat. Oregon developed the first Jersey to produce this amount of fat.
8. Oregon bred and developed the highest butter-fat producer in the breed.

It is of note that these records have been made and are being made by the owners themselves, who are dairy farmers, working under every-day conditions, and that the cost of supervising this work by the Oregon Agricultural College is supported by the breeders directly and at one of the lowest costs in the United States. The work in official records for Oregon has been accomplished, mainly, within the past ten years, and the rapid growth has taken place within the past five years.

METHODS OF OBTAINING PRODUCTION RECORDS

There are two general methods of obtaining production records; namely, official test records and cow testing association records. The official test records deal with the pure-bred animal and are discussed at length in this circular. The cow testing association records deal mainly with grade animals, but in many instances pure-bred animals are included. Through this method of testing a breeder is enabled, at a minimum cost, to ascertain what cows are paying a profitable return and what cows are not. He is able also to obtain a very good idea of the capacity of his animals. For this reason such a record is very desirable for the pure-bred dairyman who, because of lack of money, yet desires to test for his best producers, or who

has not had the experience necessary in handling cows on official test, yet wishes to learn the capacity of his animals. It is desirable that those not in position to give the time, care, or money to the official test work, get a working knowledge of the capacities of their pure-bred animals by means of the cow testing association records before entering the official record work. The cow testing association work should be a forerunner of the official test, the two working hand in hand.

IMPORTANCE OF OFFICIAL RECORDS

Nothing has been more beneficial to the breeder of pure-bred dairy cattle than official records. Each year sees keener interest in the work. The dairy farmers are realizing more and more that official records add to the value of the animals for both sale and breeding purposes. Testing has enabled the dairyman to eliminate the scrub and to weed out the "star boarder." It has brought the good cow to the front through the establishment by the various breed associations of Registers of Merit or Advanced Registers for cows and bulls meeting certain requirements. These registers are herd books within herd books.

These registers have set certain minimum requirements for fat or milk and fat in the case of cows and a minimum number of daughters in the Register of Merit or Advanced Register in the case of bulls before the animal may be admitted to advanced registry. By official tests the dairyman finds out what is the capacity of his animals for production. These records give the herd recognition due to the fact that it is thus shown to have met or excelled the minimum requirements. The higher the quality the better the price received, and consequently breeders having animals with large capacities for fat and milk production receive a larger return for their efforts in breeding.

OBJECT OF THIS CIRCULAR

The object of this circular is to promote a better general understanding of the importance of Official Testing and of the duties, responsibilities, and relationships of the breeders, the Oregon Agricultural College, and the breed associations in the Official Testing of Dairy Cattle for the State of Oregon. Few people realize, for example, that the complete responsibility for all official records made on dairy cattle in Oregon rests with the College. The various breed associations accept unquestioned all records authenticated by the Superintendent of Official Testing. A heavy responsibility rests with the College in assuming this duty. It is to be hoped that a fuller realization of this relationship will be had by the breeders who read this circular.

The circular also gives in detail the rules of the American Dairy Science Association for the conduct of Official Testing which govern the testing work in this state. Other information regarding the relation of the breeders to the College, the breeders to the supervisors, and the College and the breeders to the breed associations is included.

DEFINITION OF OFFICIAL TESTING

Official Testing may be defined as a test for milk and butter-fat production under the supervision of a qualified representative of an Agricultural College or Experiment Station for a definite period of time. In the

case of yearly records, test periods are at stated intervals, the breeder being responsible for the milk records between tests. The department of Dairy Husbandry of the Oregon Agricultural College is therefore responsible to the various breed associations and the public for the authenticity of all Official Records in Oregon. Each breed association has divided its records into classes according to age, placing different requirements for these various classes. The various breed associations have used different terminologies for these different classes, but in all cases the responsibility of the College exists as outlined above.

How Conducted

An official test is conducted by a qualified representative of the Oregon Agricultural College, who is present at each milking during the test periods, weighing and testing the product. He is charged with seeing that all the rules governing the official tests both for the College and the breed associations are carried out. He is not privileged to choose which of the rules may be waived and which not, and he is required to report to the supervising officer and to the breed association any violations of the rules. At the close of any testing period he makes complete report of all tests and observations to the Superintendent of Official Testing at Corvallis, who vouchsafes for such report to the respective breed officers.

Responsibility

Many breeders do not realize the responsibility the Oregon Agricultural College has in the Official Test work. It is the duty of the Oregon Agricultural College to see that the milk record is actually the milk produced during the test period, to see that each milking is properly and accurately tested for its butter-fat content, and to make a complete report to the respective Breed Association. Its responsibility does not stop with the actual testing, however, for the name of the Oregon Agricultural College is signed to each test report, vouchsafing to the public that such test is accurate. Thus indirectly is signed the name of each taxpayer supporting the College. To protect such records all official test work is governed by certain rules and regulations. The Experiment Stations and Agricultural Colleges working through the American Dairy Science Association formulate these rules. It is therefore the duty of each representative of the Oregon Agricultural College conducting Official Test to follow the rules, and it is the duty of each breeder doing official testing to see that these rules are carried out.

Supervisors

The representative of the Agricultural College is called a Supervisor. The supervisors are chosen from candidates who give evidence of being capable of carrying out the rules and regulations governing the official test work. It is the aim to choose only those men who are interested in dairying and dairy cattle especially. As far as possible only those men are chosen who have had training in dairy work, either through practical dairy work or through attendance in dairy courses. Before taking up their duties, the supervisors are given special training and instruction in the rules and regulations and duties of a supervisor. In addition, they are provided with sample forms carefully made out to serve as guides in the conduct of the Official Tests.

Purposes and Kinds of Tests

The purposes of Official Testing are (1) to secure information which can be used in the selection of animals for breeding purposes, with a view to improvement of offspring; (2) to demonstrate to the public the improvement which has been secured through selection and breeding. Official Testing is carried on at this time under two general types of tests, namely:

(1) *Yearly,* where the supervisor is present at every milking for one or two days each month (depending upon the breed) weighing and testing the milking. This test is used in all breeds. It is spoken of as a semi-official test by the Holstein and Shorthorn breeds.

(2) *Seven-day or longer,* where the supervisor is present as above for seven of more consecutive days. This test is used only in the Holstein and Shorthorn breeds. This test is spoken of by these breeds as an Official Test.

Benefits

The benefits to be realized from Official Testing may be summarized as follows:

1. It provides a basis for proper selection, breeding, and feeding so essential for developing a high-producing and profitable herd.

2. It increases the value of the cow, her offspring, and other relatives.

3. It stimulates personal pride in the development of the kind of dairy stock which will improve the herd.

SALES SHOW FINANCIAL VALUE OF OFFICIAL RECORDS

From the sales ring we are able to see concretely the great value attached to the Official Record as is shown by the following sales results of recent years.

Ayrshires. Sale with 96 animals consigned in 1917.

5	had Advanced Registry Records and averaged	$1945.00
40	had no records and averaged	154.00
12	were progeny of A. R. dams and averaged	376.00
39	were progeny of Non-A. R. dams and averaged	107.00

A recent National sale of Ayrshires gives the following results:

16	animals with A. R. records averaged	$ 451.00
13	animals with A. R. dams and sires averaged	469.00
34	animals with A. R. dams only, averaged	432.00
20	animals with A. R. sires only, averaged	405.00
24	animals with neither A. R. dam nor sire averaged	292.00

A recent letter from the Ayrshire offices gave further data as to the financial value of the Official Test work.

Out of 182 animals sold, 142 without records averaged $307; 40 with records averaged $478, a difference of $171 additional thus being obtained for tested cows. In another sale of 45 animals, 27 were without records and averaged $186, as against 18 with records averaging $245.

The results of the National Sale at Devon, Pennsylvania, June 1922 were:

13	animals without records and without A. R. dams or sires averaged	$397.00
10	animals with records averaged	579.00
10	animals with A. R. sires averaged	451.00
9	animals with A. R. dams averaged	658.00

Guernseys. The American Guernsey Cattle Club presents the following data relative to the 1921 sales. The average results of 28 sales were as follows:

117 females with A. R. records averaged	$617.94
231 females without A. R. records but with A. R. dams averaged	417.66
761 females without A. R. records or dams averaged	295.26
2 bulls with A. R. progeny averaged	462.50
62 bulls with A. R. dams averaged	340.08
108 bulls without A. R. dams averaged	205.04

"According to these statistics, an Advanced Registry record on a foundation cow in the average breeder's herd would increase the value of her progeny by about $125 and the cow herself will double in value."

Guernsey. A study of the 21 sales in 1922 presents the following results:

89 females with A. R. records averaged	$1290.70
170 females without A. R. records but with A. R. dams averaged	686.50
570 females without A. R. records and without A. R. dams averaged	366.40
2 bulls with A. R. progeny averaged	7687.50
73 bulls with A. R. dams but without A. R. progeny averaged	659.00
63 bulls without A. R. dams and without A. R. progeny averaged	287.80

Holsteins. A study of the sales for the first six months of the years 1921 and 1922 involving 4893 animals in 1921 and 3515 animals in 1922 made by J. R. Shepard in the Holstein-Friesian World, issue of July 29, 1922, shows the value of the records as follows:

	Group	Average Price 1921	1922
A.	Females with records	$493.00	$346.00
B.	Females without records plus tested dams	354.00	261.00
C.	Females without records and without tested dams	197.00	159.00
D.	Males with tested dams	364.00	300.00
E.	Males without tested dams	84.00	83.00

Professor G. C. White of the Connecticut Experiment Station in making a study of the 1919 sales of Holsteins involving only those animals having seven-day records (80 percent butter basis) finds the following data:

Cows without records averaged	$150.00-$250.00
Cows with records up to 22 pounds butter	300.00
Cows with records 22.5 to 27.5 pounds butter	435.00
Cows with records 27.5 to 32.5 pounds butter	960.00
Cows with records 32.5 to 37.5 pounds butter	1950.00
Cows with records over 37.5 pounds butter (9 in number)	10100.00

Professor White makes this statement: "An increase value of from 25 to 200 percent is a safe estimate, with the greatest emphasis placed on the records in the first two generations."

From the February 4, 1922 issue of the Holstein-Friesian World, the following data on sales in 1921 were obtained. Out of 70 representative sales involving 4072 animals,

1525 animals, untested and from untested dams, averaged	$196.00
1414 animals, untested but from tested dams, averaged	354.00
1133 animals, with good, bad, and indifferent records, averaged	493.00

Animals from tested dams though not tested themselves, averaged 75 percent higher than those without close-up records. Animals with records averaged 2½ times as high as those without records or backing and 40 percent higher than those untested but from tested dams.

Jerseys. Due to the American Jersey Cattle Club not having data available showing the financial value in the sales ring of Register of Merit

records, only meager local data are available. These data, given through the courtesy of the Pacific Homestead, show the averages paid in the various 1922 auction sales of the Pacific Northwest. The data, however, show the increased value of tested animals.

Group	Average Price
Females, not tested	$159.59
Females, tested	438.88
Heifers from non-tested dams	144.12
Heifers from tested dams	277.50

There was comparatively little sale of bulls unless from tested dams.

FEES FOR OFFICIAL TESTING

The cost of the Official Test work in Oregon is low. For all but the seven-day test work the fee is on a flat-rate basis. It includes salary of supervisor, railroad fare, necessary meals, hotel, and other miscellaneous charges. Where the breeder causes extra cost through his own act, such extra cost is an additional charge to his regular rate.

TESTING RATES

Each two-day test	$11.00
Each one-day test (Guernseys only)	8.50
Each herd where two or more are tested at same time but on adjoining farms	6.50
All other testing (seven-days or longer) daily plus all necessary expenses incurred	3.50

HOW TO START TESTING

There are a few simple rules, which if followed, will insure a test being conducted at the desired time and at the minimum cost.

1. Notify breed secretary of desire and arrange for permit being issued. This should be done several weeks in advance of the first test period.

2. Notify the Superintendent of Official Testing, Corvallis, if you desire to start testing, giving at least two weeks' notice. The Agricultural College will arrange for the test at the earliest moment. Holstein breeders desiring a seven-day test should give a month's notice, if possible, of intent to test.

3. Provide Babcock testing machine with a capacity of at least eight bottles. A twelve-bottle machine is preferred.

4. Provide a supply of good sulfuric acid of specific gravity 1.82 to 1.83. This may be secured at most drug stores.

5. Secure all necessary blanks and forms from the Breed Secretary.

6. Each breeder should study the Rules and Regulations so that he will know what is expected of himself, the Breed Association, and the Agricultural College.

CATTLE CLUBS AND ASSOCIATIONS

Information relative to the Official Test work in any breed, authorization to test, and the necessary forms and blanks on which to report the

work may be obtained from the respective breed association as listed below.

Ayrshire Breeder's Association, Brandon, Vt.
C. L. Burlingham, General Secretary.
W. A. Kyle, A. R. Secretary.
Brown Swiss Cattle Breeders Association, Beloit, Wis.
Ira Inman, Secretary.
American Guernsey Cattle Club, Peterboro, N. H.
W. H. Caldwell, General Secretary.
C. M. Cummings, A. R. Secretary.
Holstein-Friesian Association of America
F. L. Houghton, General Secretary, Brattleboro, Vt.
M. H. Gardner, Superintendent A. R., Delavan, Wis.
American Jersey Cattle Club, 324 West 23d St., New York City.
R. M. Gow, General Secretary.
O. H. Baker, R. of M. Secretary.
American Shorthorn Breeders' Association, 13 Dexter Park Ave., Chicago, Illinois.
J. L. Tormey, Secretary.
American Milking Shorthorn Breeders' Association, Independence, Iowa.

EXTENT OF TESTING IN OREGON, 1922

The following table shows the extent of the Official Test work in Oregon for the year ending June 30, 1922.

Two-day tests	5509
Seven-day tests	45
Retests	226
Verification tests	3
Check tests, made in other states at the request of the various breed associations	18
Total	5801

According to breed the foregoing tests were divided as follows:

Ayrshire	271	4.7%
Guernsey	574	9.9%
Holstein	734	12.6%
Jersey	4151	71.6%
Shorthorn	71	1.2%

BREEDERS TESTING

During the year 1921-22 the following number of herds in each breed were reached: Ayrshire 5; Guernsey 24; Holstein 26; Jersey 120; Shorthorn, 4; a total of 179. Below are listed those breeders who conducted Official Test work in 1921-22:

Ayrshire
Earlcrest Stock Farm, Eagle Creek
Honeyman, J. D., Warren
Lathrop Bros, Grants Pass
Oregon Agricultural College, Corvallis
Welsh, Dr. O. A., Oregon City

Guernsey
Crawford, W. Harvey, Salem
Crawford, W. N., Salem
Edmunds, H. R., Tillamook
Edmunds & Fitzpatrick, Tillamook
Engbretson, A. E., Astoria
Flint, A. B., Beaverton
Fox, Mrs. R. E., Tillamook
Goodin, W. A., Cornelius
Harwood, V. H., Astoria
Hawley, C. L., Portland
Hyder, T. B., Tillamook
Jones, R. C., Corvallis
Lance, Ira G., Tillamook
Leonard Estate Co., Grants Pass
Oregon Agricultural College, Corvallis
Reith, W. O., Astoria
Richey, J. A. & J. T., Boring
Ringo, Clyde, Mulino
Sharp, Dr. P. J., Tillamook
Slater, L. G., Eugene
Stangel, F. H., Sherwood
Thompson, R. B., Eugene
Voget, Octav, Hubbard
Whalley, John T., Hubbard

Holstein
Arp, Max, Eugene
Beals, F. R., Tillamook
Berning, C. J., Mt. Angel
Boner, W. E., Joseph

Chambers, F. E., Eugene
Connell, Frank, Hillsboro
Dunlap, Oscar L., Junction City
Evers, A. J., Forest Grove
Hofman, A. T., Tillamook
Inkley, S. C., Banks
Lindow, John A., Hillsboro
Lindow, E. P., Hillsboro
Luscher, Jacob, Fairview
McCall, Henry, Prineville
McCart, Geo. A., Harrisburg
McKeown, David, Gresham
Mullenhoff, H. G., Gresham
Myers, W. S., & Blachly, Springfield
Nelson Bros., Tillamook
Peerenboom, J. F., Roy
Phy, Dr. W. T., Hot Lake
Oregon Agricultural College, Corvallis
Rogers, A. J., Tillamook
Simpson, L. J., North Bend
Strucken, Mrs. S. M., Troutdale
Watson, Rollie, Tillamook

Jersey

Aasen, O. H., Arago
Abraham, V. S., Gaston
Agnew, A. W., Hermiston
Altman, B. C., Gresham
Anderson, A. T., Turner
Baker, L. H., Carlton
Baker, Mabel K., Canary
Baker, W. L., Canary
Bamford, Chas. H., Forest Grove
Bamford, J. R., Forest Grove
Bates, C. F., Salem
Bates, L. H., Salem
Baumgartner, Joe, Tillamook
Bays, Maurice J., Tillamook
Bays, Mrs. M. J., Tillamook
Behrmann, Will J. Jr., Forest Grove
Bellinger, Allan, Scotts Mills
Biersdorf, Geo. F., Cornelius
Bixby, A. A., Freewater
Blackadar, F. R., Tillamook
Bowman, J. L., Gresham
Brandt, P. M., Corvallis
Brewer, G. H. M., Aumsville
Brown, E. F., Independence
Brown, J. C., & Sons, Shedd
Bunn, R. M., Arago
Calef, Margaret, Eugene
Campbell, Lester, Hillsboro
Carl, John D., Arago
Cary, Ed., Carlton
Cox, Roy A., Albany
Cressy, G. A., Hermiston
Davenport, J. H., Silverton
Daniels, L. C., Tillamook
Daniels, Miss Velma, Tillamook
Demmon, Miss Alice E., Myrtle Creek
Dickson, J. M., & Son, Shedd
Donaldson, Joe, Tillamook
Falk Bros., Albany
Fisher, E. O., Oregon City
Fitzpatrick, David, Tillamook
Forrest, W. A., McMinnville
Fortner, Dr. E. S., Ontario
Fox Bros., Silverton
Gale, Wm. R., Turner
Gentry, Mrs. L. E., Aumsville
Godwin, M. H., Scotts Mills
Graves, C. H., Tillamook
Gray, Warren, Jefferson
Griggs, L. D., & Son, Eugene
Guilliume, Chas., Olney
Hadsell, H. S., Linnton
Hampton, E. E., & Son, Arago
Hanneman, Karl, Corbett
Hansen, C. A., Turner
Hertz, Dr. R. F., Corbett
Hewitt, G. G., Monmouth
Hogan, D. Brooks, Oswego
Hollenbeck, Howard, Hood River
Holt, J. G., Scio
Holt, Anna, Scio
Holt, S. B., Scio
Howard and Williams, Sherwood
Howard, D. C., Beaverton
Hunt, I. D., Portland
Ice, Dr. L. G., Oregon City
Iliff, H. D., Independence
Iron Mine Farm (W. M. Ladd), Oswego
Kemmling, John, Prineville
Kopplin, John, Gaston
Law, D. P., Oregon City
Lawrence, Geo. E., Estacada
Lawson, G. W., McMinnville
Lilly, D. G., Forest Grove
Loughary, Frank, & Son, Monmouth
Lux, P. A., Bandon
Lynn, Frank, Perrydale
Malar, Antone Jr., Boring
McArthur & Stauff, Rickreall
McCormack, L. A., Tillamook
McKee, S. J., Independence
McKee, W. H., Perrydale
Meindl, Fred J., Oregon City
Mulkey, Chester, McMinnville
Neal, Mrs. Florence, Gale, Turner
Oregon Agricultural College, Corvallis
Parker Bros., Monmouth
Parker, T. T., & Son, Amity
Perkins, Delmar, Carlton
Pickard Bros., Marion
Plank, H. L., & M. B., Junction City
Platt, Geo., Springfield
Powell, P. O., & Son, Monmouth
Pugh, E. G., Independence
Reid, Clifford, McMinnville
Reid, C. J., & Lorenzen Bros., Dayton
Rhoten, E. A., Salem
Riches, S. A., Turner
Riches, W. T., Turner
Robertson, Clyde E., Forest Grove
Rogers & Grund, Monmouth
Sander, H. B., Marshfield
Seeley, R. B., Sherwood
Skene, D. F., Oregon City
Smith, L. G., Scappoose
Smith, N. H., Oregon City
Smith, Roy C., Oregon City
Spangler, A. A., Oregon City
Spence, C. E., Oregon City
Stewart, Henry, Albany
Thompson, O. A., Blachly
Trigg, L. P., Norway
Van Kleek, J. J., & Son, Beaverton

Watt & Acree, Hood River
Watts, E. F., Hillsboro
Weiss, Sam, Boring
West, Harry, Scappoose
Williams, Mrs. Alice, Carlton
Williams, R. C., Sherwood
Williams, Thomas, Forest Grove

Shorthorn

Ayer, W. B., (Foothills Farm), Carlton
Moran, R. F., Medford
Oakleigh Stock Farm, Medford
Rogue River Valley Canal Co., Medford

The Breeders were divided among the counties as follows:

County	*Ayrshire*	*Guernsey*	*Holstein*	*Jersey*	*Shorthorn*	*Total*
Benton	1	2	1	2	....	6
Clackamas	1	2	....	14	....	17
Clatsop	....	3	....	1	....	4
Columbia	1	....	....	2	...	3
Coos	....	....	1	7	....	8
Crook	....	....	1	1	....	2
Douglas	....	....	....	1	...	1
Hood River	...	...	...	2	.	2
Jackson	....	....	....	....	3	3
Josephine	1	1	....	....	....	2
Lane	....	2	4	7	....	13
Linn	....	....	1	8	....	9
Malheur	....	....	....	1	....	1
Marion	....	4	1	17	....	22
Multnomah	1	1	4	6	....	12
Polk	....	....	....	12	....	12
Tillamook	....	6	5	10	....	21
Union	....	....	1	....	....	1
Umatilla	....	....	....	3	...	3
Wallowa	....	....	1	....	....	1
Washington	....	3	6	16	....	25
Yamhill	....	....	....	10	1	11
Total	5	24	26	120	4	179

ACTUAL COST OF OFFICIAL TESTING

The following table shows how much the work actually cost for the year ending June 30, 1922. The data show the average monthly cost per herd and per cow. This table shows the division of the fees received from the breeders. In addition the College contributes the time of a man required for supervision and furnishes office space, heat, and light.

EXPENDITURES	*Per herd*	*Per cow*
Supervisors—		
Salaries	$ 6.99	$ 1.59
Expenses, including travel, meals, etc.	1.89	.43
Office expenses (including clerical help, office supplies, express, postage, telegrams, telephone, etc.)	1.09	.25
Equipment (including glassware, testing cases, etc.)	.21	.04
Interest (on loan to carry on the work)	.04	.01
Total	$10.22	$ 2.33
RECEIPTS		
Monthly average ($1148.50)	$10.44	$ 2.37
Expenditures	10.22	2.33
Surplus for sinking fund	.22	.04
Average number of herds on test per month	110	
Average number of cows on test per month	483	

OREGON'S WORLD RECORDS

Of the 80 highest records in Jerseys, Oregon holds almost one-third. Undoubtedly certain changes in these records or additions to them will occur before this circular is off the press. All standings of Oregon records, however, have been brought up to as near May 1, 1923, as possible.

Oregon holds six out of the eight possible World records in classes A and AA as follows:

Name and H. R. Number	*Owner at time of test*	*Milk lbs.*	*Avg. fat %*	*Fat lbs.*	*Class*
Senior One Year Old					
St. Mawes Lad's Lady, 451568	H. D. Iliff, Independence	11756	7.05	829.09	A
Junior Two Year Old					
Pearly Exile St. Lambert, 205101	W. J. Domes, McCoy	12346	6.61	816.10	A
Senior Two Year Old					
St. Mawes Pretty Lady, 432698	L. C. Daniels, Tillamook	12550	6.57	824.33	AA
Junior Three Year Old					
Poppy's Dortha, 378520	F. E. Lynn, Perrydale	17804	5.58	994.25	A
Junior Four Year Old					
Darling's Jolly Lassie, 435948	Pickard Bros., Marion	16425	6.95	1141.28	A§
Senior Four Year Old					
Vive La France, 319616	Pickard Bros., Marion	14926	6.91	1031.64	AA

In Class AAA, Oregon holds 6 of the possible 8 Class leaders as follows:

Name and H. R. Number	*Owner and Address*	*Milk lbs.*	*Fat lbs.*	*Days carried calf*
Junior Two Year Old				
Silver Chimes Betsey Fern, 478089	O. A. Thompson Blachly, Ore.	11371	625.59	171
Senior Two Year Old				
St. Mawes Susy 3d, 432624	Ed Cary, Carlton, Ore.	10789	616.98	259
Junior Three Year Old				
Nancy's Pride of Laurchester 498221	C. L. Mulkey, McMinnville, Ore.	12971	733.13	182
Junior Four Year Old				
St. Mawes Majesty Bess, 410902	Parker Bros., Monmouth, Ore.	12214	735.27	193
Senior Four Year Old				
Lulu Flossie of Ashburn, 374316	J. M. Dickson & Son, Shedd, Ore.	14603	698.32	218
Mature				
La Creole's St. Saviour's Belle, 390543	W. J. Behrman, Jr., Forest Grove, Ore.	13453	746.95	189

Oregon holds 12 out of the 28 Gold Medal Bulls; 20 out of the 49 Silver Medal Bulls and 1 out of the 2 Medal of Merit Bulls of the Jeresy Breed up to May 1, 1923. There are several medal bulls pending at this date.

GOLD MEDAL BULLS

* Gold and Silver Medal Bulls; †Medal of Merit Bulls.

	Animal and Number	*Owner and Address*
1.	Daisy's Golden Poppy, 143372*	C. L. Mulkey, McMinnville, Oregon
2.	Eminent 19th, 78620	North Carolina Dept. of Agriculture, Raleigh, N. C.
3.	Eminent's Pilot, 75364	D. C. Dilworth, Spokane, Washington
4.	Fauvic's Prince, 107961†	A. V. Barnes, New Canaan, Connecticut
5.	Golden Glow's Chief, 61460 *	Pickard Bros., Marion, Oregon
6.	Hillside Torono, 101729	Dairy Division, B. A. I., Washington D. C.
7.	Holger, 109744†	Wm. McBride, Shedd, Oregon
8.	Hood Farm Torono, 60326 *	C. I. Hood, Lowell, Massachusetts

§ Bred for Class AA.

9.	Imported Golden Fern's Noble, 145726	W. R. Proctor, Berryville, New York
10.	Imported Oxford You'll Do, 111860	T. S. Cooper & Son, Coopersburg, Pennsylvania
11.	Irene's King Pogis, 73182	Clark & Emery, Belvidere, N. Y.
12.	Owl's Temesia's Owl, 94772	J. S. Sibley, Spencer, Mass.
13.	Pogis 75th of Hood Farm, 94501	Ed Cary, Carlton, Oregon
14.	Pogis 99th of Hood Farm, 94502 *	C. I. Hood, Lowell, Mass.
15.	Poppy's St. Mawes, 115434	Ed Cary, Carlton, Oregon
16.	Rinda Lad of S. B., 89518 *	G. G. Hewitt, Monmouth, Oregon
17.	Rosaire's Olga Lad, 87498 *	Ed Cary, Carlton, Oregon
18.	Royal Majesty, 79313	E. S. George, Detroit, Michigan
19.	Silver Chimes of Ashnook, 133916 *	O. A. Thompson, Blachly, Oregon
20.	Silver Chimes of S. B., 96021 *	Del Perkins, Carlton, Oregon
21.	Sophie 19th's Tormentor, 133302 *	Ed Lasater, Falfurrias, Texas
22.	Spermfield Owl, 57088	R. A. Sibley, Spencer, Massachusetts
23.	St. Mawes, 72053	W. A. Haynes, Eagle, Idaho
24.	St. Mawes Lad, 130501 *	S. J. McKee, Independence, Oregon
25.	The Imported Jap, 75265 *	Ayer & McKinney, Meredith, New York
26.	Tiddledywink's Noble, 106587 *	Mrs. Florence Gale Neal, Turner, Oregon
27.	Valentine's Ashburn Baronet, 100044 *	J. M. Dickson & Son, Shedd, Oregon
28.	Sibley's Choice, 83040*	R. A. Sibley, Spencer, Massachusetts

SILVER MEDAL BULLS

* Gold and Silver Medal Bulls; † Medal of Merit Bulls.

	Animal and Number	*Owner and Address*
1.	Adelaid's Sultan, 123005	Geo. Eldridge, Fruitland, Idaho
2.	Compound Int'd Prince Owl, 137849	E. B. Barkclay, Oxford, Ohio
3.	Daisy's Golden Poppy, 143372 *	C. L. Mulkey, McMinnville, Oregon
4.	Darling's Gallant Boy, 154816	Pickard Bros., Marion, Oregon
5.	Fauvic's Prince, 107961†	A. V. Barnes, New Canaan, Connecticut
6.	Gamboge Knight's Fox, 106160	Meldrum Gray, Roswell, New Mexico
7.	Gamboge's Prince, 105565	Hartman Stock Farm, Columbus, Ohio
8.	Gamboge Whitie's Majesty, 121493	J. G. Howland, Quechee, Vermont
9.	Golden Glow's Chief, 61460 *	Pickard Bros., Marion, Oregon
10.	Gedney Farm Girl's Oxford, 75998	J. G. Howland, Quechee, Vermont
11.	Heir of Crystal Spring, 136987	Ayer & McKinney, Meredith, New York
12.	Holger, 109744†	Wm. McBride, Shedd, Oregon
13.	Hood Farm Torono, 60326 *	C. I. Hood, Lowell, Massachusetts
14.	Hood Farm Torono 35th, 99265	O. E. Stevens Henry, Rockville, Conn.
15.	Hood's Sophie's Tormentor, 145709	U. S. Bureau of Animal Industry, Washington, D. C.
16.	Imported Financial Baron, 139499	A. F. Chaffie, Hotchkiss, Colorado
17.	Imported Majesty 2d, 152182	F. C. Baldwin, Fredericksburg, Pa.
18.	Lou's Torono, 106614	Fairview Farm, Inc., Atlanta, Georgia
19.	Meridale Prince Darling, 135643	E. L. Thompson, Dover, New Jersey
20.	Noble's Sensational Lad, 118536	Elmhurst Farm, Shelby, Michigan
21.	Pogis 99th of Hood Farm, 94502 *	C. I. Hood, Lowell, Massachusetts
22.	Pogis Oneida's Chief, 141024	Wm. Ladd, Portland, Oregon
23.	Poppy's St. Mawes Prince, 126055	C. H. Bamford, Forest Grove, Oregon
24.	Raleigh's Combination, 107229	J. R. Humphries, Asworth, Georgia
25.	Raleigh's Fairy Boy 9th, 113825	H. G. Gross, Eureka, California D. W. Coppini, Ferndale, California
26.	Rinda Lad of S. B., 89518 *	G. G. Hewitt, Monmouth, Oregon
27.	Rosaire's Olga Lad, 87498 *	Ed Cary, Carlton, Oregon
28.	Rosaire's Golden Mowatt, 158405	Warren Gray, Jefferson, Oregon
29.	Sayda's King of Meridale, 121724	G. M. Bliss, St. Albans, Vermont
30.	Sibley's Choice, 83040*	R. A. Sibley, Spencer, Massachusetts
31.	Silver Chimes of Ashnook, 133916 *	O. A. Thompson, Blachly, Oregon
32.	Silver Chimes of S. B., 96021 *	Del Perkins, Carlton, Oregon
33.	Sophie 19th's Tormentor, 113302 *	Ed Laster, Falfurrias, Texas
34.	Sophie's Emblem, 135038	O. R. & K. T. Wigand, Cleveland, Wisc.
35.	Sophie Premier, 111613	R. H. Anderson, West Austintown, Ohio
36.	Spermfield Prince Interest, 95697	F. A. Kennedy, Windsor, Vermont
37.	St. Mawes Golden Poppy, 125510	F. E. Lynn, Perrydale, Oregon
38.	St. Mawes Lad, 130501 *	S. J. McKee, Independence, Oregon
39.	St. Mawes Noble, 132488	J. C. Brown & Son, Shedd, Oregon
40.	St. Mawes of Ashburn, 115996	J. M. Dickson & Son, Shedd, Oregon
41.	St. Mawes of Ashwood, 139897	McArthur & Stauff, Rickreall, Oregon

42. St. Mawes Poppy's Rosaire Lad, 155865..Geo. F. Biersdorf, Cornelius, Oregon
43. Sultan Telivo, 152511 ..... University of Nebraska, Lincoln, Nebraska
44. The Imported Jap, 75265 * ..... Ayer & McKinney, Meredith, New York.
45. The Jap's Owl, 138146 ..... Ayer & McKinney, Meredith, New York.
46. Tiddledywink's Noble, 106587 * ..... Mrs. Florence Gale Neal, Turner, Oregon
47. Tiddledywink's Raleigh, 158391 ..... C. Laughlin, Belle Center, Ohio
48. Valentine's Ashburn Baronet, 100044 * ...J. M. Dickson & Son, Shedd, Oregon
49. Bell's St. Mawes Lad, 155846..... L. C. Daniels, Tillamook, Oregon
50. Morocco's Pioneer, 105679 ..... T. S. Griffith, Spokane, Washington

MEDAL OF MERIT BULLS

* Gold and Silver Medal Bulls.

	Animal and Number	*Owner and Address*
1.	Fauvic's Prince, 107961 *.....	A. V. Barnes, New Canaan, Connecticut
2.	Holger, 109744 *	Wm. McBride, Shedd, Oregon

MEDAL OF MERIT COWS

The following cows have won the Medal of Merit up to May 1, 1923. Of the 49 records, Oregon holds 17.

Name and H. R. Number	*Owner and Address*	*Fat lbs.*	*Age*	*Class*
Darling's Jolly Lassie, 435948	Pickard Bro., Marion, Ore.	1141.28	J-4	A*
Prince's Emma of H. S. F., 359390	Hartman Stock Farm Columbus, Ohio	1109.99	M	A*
Lad's Iota, 350672	S. J. McKee, Independence, Ore.	1048.07	M	AA
Plain Mary, 268206	Ayerdale Stock Farm, Bangor, Me.	1040.08	M	AA
Vive La France, 319616	Pickard Bro., Marion, Ore.	1039.29	M	AA
		1031.64	S-4	AA
Fauvic's Star, 313018	A. V. Barnes, New Canaan, Conn.	1005.90	M	AA
Sophie's Agnes, 296759	Ayerdale Stock Farm, Bangor, Me.	1000.07	M	AA
Madeline of Hillside, 389336	J. T. Carpenter, Shelburne Falls, Mass.	965.86	M	AA
Dosoris Park Lilly, 233783	Est. of Chas. Pratt, Glenn Cove, N. Y.	957.43	M	AA
Princess Xenia, 356699	A. V. Barnes, New Canaan, Conn.	951.85	M	AA
Lad's Little Pauline, 349277	S. J. McKee, Independence, Ore.	941.59	J-4	AA
Lucky Farce, 298177	A. W. Murphy, Cleveland, Ohio	938.75	M	AA
Olympia's Fern, 252060	E. L. Brewer, Satsop, Wn.	937.80	S-4	AA
Sophie 19th of Hood Farm, 189748	C. I. Hood, Lowell, Mass.	931.90	M	AA
Norena of Ashwood, 361363	McArthur & Stauff Rickreall, Ore.	928.61	M	AA
Gwendola Rosaire, 308732	F. A. Doerfler, Silverton, Ore.	919.88	M	AA
Goldie's Nehalem Beauty, 283330	C. F. Reid, Portland, Ore.	904.91	S-4	AA
Helma of Ashwood, 352476	McArthur & Stauff, Rickreall, Ore.	903.56	M	AA
La Belle's Girl, 270186	S. J. McKee, Independence, Ore.	901.70	M	AA
Sophie's Tormentor's Floss, 387409	Hood Farm, Inc., Lowell, Mass.	901.05	M	AA
Bright Morning's Sultana, 395493	Brown & McDonald, Cleborne, Texas	900.06	J-4	AA
Temisia's Owl's Grace Darling, 310913....	J. R. Sibley, Spencer, Mass.	899.69	M	AA
Irene's Amelia, 272865	L. S. Clark, Belvidere, N. Y.	892.59	M	AA
Figgis' Beulah, 309530	O. Mills, Stattsburg, N. Y.	891.35	M	AA
Sophie's Tormentor's Elinda, 376896	Hood Farm, Inc., Lowell, Mass.	891.00	S-4	AA

* Bred for Class AA.

Pride's Oxford Mary, 389612	C. J. Maxham, Woodstock, Vt.	890.09	J-4	AA
Pride of L'Etacq, 371346	C. C. Webber, Crystal Bay, Minn.	887.15	M	AA
Birdie Owl of M. L. P., 415227	W. M. Ladd, Portland, Ore.	883.36	S-3	AA
Lady's Silken Glow, 313311	Pickard Bro., Marion, Ore.	882.56	M	AA
The Seer's Alberta 2d., 211378	E. T. Bedford, Greens Farms, Conn.	881.66	M	AA
Fauvic Ruth, 385463	A. V. Barnes, New Canaan, Conn.	877.70	S-4	AA
Raleigh's Torono Coral 2d., 352298	Ayerdale Stock Farm, Bangor, Me.	876.80	S-4	AA
Poet's Mable Mowat, 479804	K. Hanneman, Corbett, Ore.	872.03	J-3	AA
Majesty's Fair Maid, 495310	R. Halladay, Cresskill, N. J.	871.14	M	AA
Roe's Golden Lady, 215441	J. E. Kelley, Winn, Me.	870.24	M	AA
Lass 47th of Hood Farm, 240327	C. I. Hood, Lowell, Mass.	869.55	M	AA
Jap Sayda's Baroness, 321895	Ayer & McKinney, Meredith, N. Y.	866.78	J-4	AA
Temisia's Owl's Rose, 215973	R. A. Sibley, Spencer, Mass.	863.80	M	AA
Betty's Lady Fern, 340177	S. J. McKee, Independence, Ore.	860.56	M	AA
Minetta of Ashwood 330962	N. H. Smith, Oregon City, Ore.	860.36	J-4	AA
Raleigh's Sigma, 241848	Whiteacre & Son, West Liberty, Iowa	859.56	M	AA
Fauvic's Star, 313018	A. V. Barnes, New Canaan, Conn.	858.83	M	AA
Lass 40th of Hood Farm, 223642	C. I. Hood, Lowell, Mass.	854.90	M	AA
Jap's Achsa Belle, 306051	Ayer & McKinney Meredith, N. Y.	854.01	M	AA
Tessie of Ashwood, 371223	McArthur & Stauff, Rickreall, Ore.	853.86	S-4	AA
Successful Queen, 278743	C. I. Hood, Lowell, Mass.	852.72	J-4	AA
Noble Lad's Lady Helen, 364030	Geo. F. Biersdorf, Cornelius, Ore.	850.36	M	AA
La Creole's St. Saviour's Belle, 390543	W. J. Behrman, Jr., Forest Grove, Ore.	746.95	M	AAA

RULES GOVERNING TESTS; SUPERVISORS OF TESTS; OWNERS AND ATTENDANTS

I. UNIFORM RULES

The following uniform rules have been adopted by the American Dairy Science Association for the conduct of Official Tests throughout the United States. These rules govern the testing in Oregon, being supplemented by certain additional rules found in the Appendix immediately following Part II. The authorities in Oregon, being responsible for the authenticity of records made in Oregon, reserve the right to interpret these rules and add to them as circumstances may warrant.

1. **Rules Must be Followed.** The supervisor is not at liberty to decide as to which stipulations contained herein are essential and which are not, but is required to observe these directions in all details.

2. **Relationship of Supervisor.** The supervisor shall bear in mind at all times that he is in the employ of the Agricultural College or Experment Station of the state employing him and that he is not in any way working for the owner of the cow on test or for the breed association. The *only interest* that the supervising institution has in the test is that it shall be honestly and accurately made and the Agricultural College or Experiment Station supervising said test *insists* that this be done.

3. **Identity and Condition of Cows.** The supervisor shall satisfy himself as to the identity of each cow under test. Certificates of Registration must be presented for the identification. Animals not having distinctive markings indicated on Registration papers must be tattooed in the ear with such letters, characters, or numbers as the owner may adopt. These identification marks must be recorded with the breed association and the institution as well. All animals which cannot be identified under the above rules must be reported as unidentified. Complete identification is of the utmost importance and *must not be neglected.* The supervisor shall note upon his report form any sickness of a cow or other condition likely to affect the reliability of a test. He shall also report any irregularity or suspicious occurrence.

4. **Unidentified Cows.** Unidentified cows are allowed to be placed on test, the institution however assuming no responsibility as to the identity of the animal—this matter must be attended to between the owner and the breed association. All animals must be identified before the record is completed or no record will be reported. Test reports of unidentified cows must be accompanied by color sketch or description of the cow so tested.

5. **Possessor Considered Owner.** For all purposes of Official Testing work, the possessor is considered the owner and is required to treat the animal as such, presenting all necessary data, the same as for his own.

6. **Preliminary Milkings.** Preliminary milkings are required. The supervisor shall be present at the last regular milking preceeding the beginning of the test, and shall see that the cow is milked dry. He shall note the hour that this milking is made, and the last milking of the test shall be made at the same hour.

7. **Seeing the Cow Milked.** The supervisor shall be present at and throughout each and every milking during the test period and shall see that the pail contains nothing but the milk drawn from the cow under test. Before each milking period, the supervisor shall observe that the milk pail is free from grease or other material and the supervisor shall carry the milk pail at all times during the milking period, allowing the pail out of his hands only after the milker is seated, ready to begin milking, and during the actual milking process. Under no circumstances shall more than one cow undergoing test be milked at the same time and the supervisor must in every case be in position to observe the milker during the entire milking process.

A. *Milking Machines.* Where milking machines are used no second man as stripper is allowed. Milking machines are to be let run idle for a few moments before attaching to the cow to insure that no milk is coming from another source.

B. *Right of Search.* The supervisor has the right to search the milker at any time and to require milkers to roll sleeves up to the elbows. Refusal on the part of the milker will be construed as evidence of intent to make a fraudulent test.

8. **Weighing Milk.** The supervisor shall assure himself as to the accuracy of the scales used, checking those of the owner with those provided by the institution, these being graduated to pounds and tenths (1-10) of a pound. He shall weigh the empty milk pail before each milking, retaining possession of the pail until the milker is seated and ready for milking. After each milking is completed he shall weigh the milk immediately and record the exact weight of the milk in his Field Notes and also see that the correct weight is recorded upon the owner's barn record. The pounds of milk must be recorded in one decimal, as 14.5 lbs. Any inaccuracy in the owner's scales shall be reported.

9. **Sampling Milk.** The supervisor shall take a sample of the milk of each milking immediately upon the weighing of the milk, being careful that the milk is thoroughly mixed by pouring from one pail to another at least twice to insure a fair sample of the whole—the owner being required to provide an extra pail for this purpose. Such samples (properly labeled) must be securely retained until tested, under the absolute control of the supervisor, either being in his actual possession or securely locked in the testing case provided. The samples must be tested as soon as convenient after the samples have cooled to ordinary room temperature, which is 60 to 70 degrees F. When the last samples at night are kept until morning, in warm weather preservative should be added to each sample.

10. **Applying the Babcock Test.** The supervisor shall apply the Babcock test to the milk of every milking during the test period, making a separate test in duplicate of each milking. He shall determine the percentage of butter-fat in each sample, making a duplicate test of each milking and recording the same. Should the duplicate tests of each sample of milk vary more than two-tenths of one percent (.2%), the testing of the sample of milk must be repeated. If the variation is .2% or less, then the average of the duplicate tests shall be used in figuring the amount of butter-fat in the sample of milk. Readings of the test bottles shall be made at 130 to 140 degrees F. This temperature shall be obtained by placing the

bottles in a hot water bath for five minutes before reading the tests. The supervisor shall record these readings immediately in his Field Notes. Samples taken at any one milking shall not be thrown away until satisfactory duplicate tests of the milking are obtained.

11. **Lost Milk and Lost Samples.** No substitution of lost milkings or lost samples is allowed. The supervisor shall report that portion of the test for which *exact* data are at hand. Any missing data due to loss of milk weights or test samples are to be left blank on the report.

12. **Report of High Production.** When the following requirements in a two-day (48-hour) test period have been met, a special report must be made to the State Superintendent of Official Testing.

Junior 2 year old	4.0 lbs. fat
Senior 2 year old	4.4 lbs. fat
Junior 3 year old	4.8 lbs. fat
Senior 3 year old	5.2 lbs. fat
Junior 4 year old	5.6 lbs. fat
Senior 4 year old	5.8 lbs. fat
Mature	6.0 lbs. fat

13. **Preliminary Reports.** A preliminary report card shall be mailed by the supervisor immediately after the test directly from the farm to the breed secretary.

14. **Reports of Supervisors.** The supervisor shall sign his reports and mail them promptly to his appointing office for checking and endorsement.

15. **Number of Milkings Allowed to be Supervised at one Time.** No supervisor is allowed to supervise more than twenty-four (24) milkings per day, without special permission from the State Superintendent of Official Testing, unless all cows under test are milked twice daily, when a limit of thirty (30) is permissible.

16. **Test Periods Exceeding two Days.** Where a test is conducted longer than the regular two days, or where more than one test is made in a month, all details of each test from beginning to end must be reported.

17. **Payment of Supervisors.** Under no circumstances shall any payment, gift, or gratuity to the supervisor be made by, or permitted from the owner of the cow or any one interested in her, and any violation of this rule will invalidate the test.

18. **Supervisors to Conduct Tests—Not Make Them.** The supervisor appointed to conduct a test is the direct representative of the Superintendent of Official Testing and needs to be treated in all respects as though he were the appointing officer in person. His duties are to conduct tests only.

19. **Sworn Statements.** Each supervisor is required to fill out a sworn statement covering all his work, which eliminates the necessity of his affirming test reports.

20. **Responsibility for Enforcement of Rules.** Owners, and persons in their employ, are held equally responsible with the supervisor for the enforcement of the foregoing rules.

II. HOLSTEIN SEVEN-DAY OR LONGER TESTS

1. **Holstein Seven-Day or Longer Tests.** Subject to the general rules as outlined for the conduct of yearly work in Part I, the following rules pertain to seven-day or longer test periods, and are additional to Part I.

2. **Partial Preliminary Reports.** Upon the completion of three calendar days of an Official Test in which the daily fat production shall equal or exceed the following requirements, the supervisor shall fill out Form 5 of the Holstein blanks in duplicate and forward one copy to the Superintendent of Advanced Registry and one to the Superintendent of Official Testing and shall continue to send such reports every second day, until the daily average for the animal's class shall fall below such requirements, regardless of whether or not a verification test has in the meanwhile been conducted. The Superintendent of Advanced Registry may call such other than automatic verification tests as he sees fit.

Requirements for Partial Preliminary Reports

Heifers, first calf .....6.75 lbs. fat in three consecutive calendar days.
Heifers, second calf .....8.10 lbs. fat in three consecutive calendar days.
Heifers, third calf .....9.00 lbs. fat in three consecutive calendar days.
Older animals .....9.75 lbs. fat in three consecutive calendar days.
Any animal of any age, seemingly in normal condition and averaging for three consecutive days 5 percent fat.

In order to aid in determining when this report is needed, the following table of daily average fat production is given.

Heifers, first calf .....daily average of 2.25 lbs. fat
Heifers, second calf .....daily average of 2.70 lbs. fat
Heifers, third calf .....daily average of 3.00 lbs. fat
Older animals .....daily average of 3.25 lbs. fat

3. **Verification Tests.** All verification tests are to be constant watch, two supervisors at least alternating in keeping cow under constant observation, each supervisor using his own outfit, each being present at every milking and taking part in all determinations of weighing, sampling, and testing; the sample cases to be always in sight of the supervisor on duty, to avoid any access being gained to untested samples. The cow is to be watched in order to prevent the tampering with her by drugging or in any other manner whatever.

The Superintendent of Advanced Registry may reject any such test if he deems it not satisfactory, and the expense is to be borne by the owner. If accepted, the Association will pay all expenses.

Animals under verification should produce proportionately. Should any animal under verification fall below her yields of fat for the previous day (24-hour period) by more than 10 percent, the verification of that animal should be extended one day for further trial.

The following amounts of butter-fat production in four consecutive 24-hour periods, call for automatic verification and the supervisor is to notify the appointing officer at once.

Class	*Production*	*Daily calendar average indicating verification is approching*
Junior 2	10.4	2.60
Senior 2	11.6	2.90
Junior 3	12.4	3.10
Senior 3	13.2	3.30
Junior 4	14.0	3.50
Senior 4	14.4	3.60
Mature	14.8	3.70

When productions average four pounds daily, verifications are to cover two days; for less production, one day.

4. **Lost Milking or Lost Tests.** See Rule 11, Part I of Uniform Rules.

APPENDIX TO THE RULES GOVERNING CONDUCT OF OFFICIAL TESTS

The following rules for the further guidance of the supervisors in Oregon elaborate certain of the preceeding rules and indicate those rules wherein the conduct of the Official Tests in Oregon differs from that indicated in the preceding rules.

A. **Preliminary Milking (Rule 6).** The supervisor shall weigh, sample, and test the preliminary milking the same as any regular milking of the test. These data must be recorded in his Field Notes and on the blanks provided by the breed associations.

B. **Steps in the Babcock Test of Whole Milk (Rule 10)**

1. Temper sample of milk to 60 to 70 degrees F.
2. Mix thoroughly by pouring from one bottle to another three or four times—never shaking samples.
3. Pipette 17.6 cc. of milk, taking a duplicate test.
4. Add 17.5 cc. sulfuric acid, adding more than 17.5 cc. of acid if acid is weak or less if strong, desired color being a light coffee color.
   a. Strong acid causes charring of the solids not fat; dark fat columns; specks in the fat column.
   b. Weak acid leaves undissolved particles at base of fat column; very light colored fat column; grayish or white particles in fat column.
5. Whirl at proper speed for five minutes, usually 80 revolutions of handle per minute.
6. Add hot water (170 to 180 degrees F.), bringing the fat to neck of bottle. Above temperatures apply to hand testers.
7. Whirl two or three minutes.
8. Add hot water (170 to 180 degrees F.), bringing the fat column to the 6 percent mark. Above temperatures apply to hand testers.
9. Whirl one or two minutes.
10. Place in water bath of 130 to 140 degrees F. for five minutes. *Be sure entire fat column* is surrounded with the hot water.
11. Read from bottom of fat column to extreme top of fat column, using dividers for this purpose.

C. **Recording Tests (Rule 10).**

In recording tests use the following system: The percent of fat is to be recorded in one decimal, as 3.2%, except where a difference of .1% exists between duplicates, when the percent of fat shall be recorded in two decimals (3.2%-3.3%) 3.25%. The pounds of fat shall be recorded in four decimals, as .3453 pounds of fat.

D. **Cautions (Rule 10)**

1. Label samples and tests of samples so that no possible confusion may ensue.

2. Accept only accurate, clear-cut fat columns.
3. Watch temperatures—use the thermometer—never guess at temperatures.
4. Avoid unnecessary breakage of glassware.
5. Keep glassware scrupulously clean. Clean equipment at the close of every test.

E. **Determining Fat Percentage (Rule 10).**

The average percentage of fat shall be determined by dividing the total yield of fat for any test period by the total yield of milk for the same test period. It should be recorded in three decimal places, as 2.275%.

F. **Retesting (Rule 12).** Retests fall under the following provisions:

a. **Automatic or Compulsory.** The requirements as presented in rule 12 are suggested uniform retest requirements. Until the same are accepted by the various breed associations, the following requirements will call for automatic retests.

When Fat production for two days is in excess of the pounds listed below.[4]

Age	*Holstein*[1]	*Jersey*	*Guernsey*[2]	*Ayrshire*[3]	
	lbs.	*lbs.*	*lbs.*	*Milk lbs.*	*Fat lbs.*
Yearlings	4.2	4.0	4.2	105	4.2
Junior two year old	4.2	4.0	4.2	105	4.2
Senior two year old	4.6	4.4	4.4	105	4.2
Junior three year old	5.0	4.8	4.6	120	4.8
Senior three year old	5.4	5.2	4.8	120	4.8
Junior four year old	5.8	5.6	5.0	135	5.4
Senior four year old	6.0	5.8	5.2	135	5.4
Mature	6.2	6.0	5.4	150	6.0

[1] **Holstein.** (In addition to the foregoing.) Any monthly test made not less than (45) forty-five nor more than (7) seven months from freshening, though not exceeding the production in butter-fat specified in foregoing table yet while showing three-fourths (¾) of the specified production also shows an average percent of fat during this time exceeding 4 percent, with no marked falling off in milk production near or at the time of test such as results from a cow not being in normal condition, such higher percent of fat shall automatically require a second two-day test.

[2] **Guernsey.** In the case of the one-day test, one-half (½) of these amounts will call for retest.

[3] **Ayrshire.** Retest based on either milk or fat production.

[4] These requirements are for the second month of test to the end for Holsteins and Ayrshires and apply for **every** month on test for Jerseys and Guernseys.

b. **Optional With Owner.** An owner may have as many retests at his own expense as he desires, provided the supervising institution can accommodate with a supervisor.

Special Ruling. Where the retests are requested by the owner, all animals tested in the same two-day regular period must be retested. This is to avoid any chance for criticism of Oregon records.

c. **Optional With Agricultural College.** The supervising institution may call retests where it considers it advisable, such retests being at no expense to the owner except accommodations at the farm.

d. **Optional With Breed Association.** The breed association may call retests at its discretion, paying all costs of such tests except accommodations at the farm.

e. **Reporting and Use of all Retest Data.** All retest data must be reported to the supervising institution and the breed association. The breed association will determine whether any or all such data shall be accepted or rejected. Ordinarily, the average of all tests conducted during the month is used to determine the average percent of fat for that month. The associations retain the right to reject any test and to use the average of the preceeding and succeeding months' tests if they see fit to do so.

G. **Preliminary Reports (Rule 13).** The following card colors are used. Where cards are not available, fill in the necessary data on a common post card.

Ayrshire	White
Guernsey	Yellow
Holstein	Salmon
Jersey	Yellow
Brown Swiss and Shorthorn	No card provided as yet.

H. **Reports of Supervisors (Rule 14).** The breed reports must be filled out in ink while the supervisor is still on the farm. The Field Notes are to be filled out in pencil and a copy left with the owner or manager. The supervisor must send the following data to the Superintendent of Official Testing at the close of every test: Field Notes, Form A (or B); breed association blank; expense account, Form E.

Holstein Reports. In the case of a seven-day or longer test, which must be sworn to by the owner, feeder and milker, the breed blank may be left with the owner for such signatures and oaths, who will forward the report as soon as attested to the Superintendent of Official Testing. The supervisor will, in this case, send Forms "B" and "E" as usual.

I. **Report on Previous Milk Weights.** The following previous milk weights must be reported for the various breed associations. These are milk weights for full calendar days:

Six Previous Days' Milk Weights	
Ayrshire	Holstein
Six Scattered Days' Milk Weights	
Brown Swiss	Jersey
Guernsey	Shorthorn

J. **Test Periods Exceeding Two Days (Rule 16).** In addition to the rule as given the following special breed condition is to be met.

Holstein. A seven-day or longer test takes the place of a two-day test, though it is not allowable to select a two-day period out of the longer period for a monthly test—the entire period must be used.

K. **Number of Supervisors Needed.** In all yearly or semi-official work, the supervisors will be changed as frequently as practicable.

III. GENERAL AND MISCELLANEOUS INFORMATION

The following information is presented with the idea of placing before the breeder miscellaneous information which he should have relative to his own breed. The breeder will also be enabled, through the information presented, to become acquainted with the rules existing in other breeds and to compare the requirements under which his records are made with the corresponding requirements of other breeds. It is expected that from time to time the various breed associations will make changes in their special regulations.

1. **Application to Test.** All breed associations require that an application be presented to them before starting a test, so that a permit may be issued to the supervising institution to that effect. The Oregon Agricultural College requires that the Superintendent of Official Testing, Oregon Agricultural College, Corvallis, be notified at least two weeks before a supervisor is desired, giving breed and number of animals to be tested and in the case of seven-day testing, the probable length of time supervisor is desired.

2. **Fees and Expenses.** All fees and expenses must be paid promptly. The owner pays all testing expenses except certain retests and verification tests, which are paid by the breed associations. All bills more than 30 days delinquent are referred to the breed associations. Further testing is dependent upon their action. Two or three months' delinquency usually results in withdrawal of testing privileges.

3. **Reporting Records.** The owners of cows making records must report on blanks furnished by the respective breed associations, the weight of each and every milking. These reports must be in the hands of the breed association within thirty days of the close of that calendar month for which a record is being made. All barn sheets shall be kept until the records thereon are approved.

4. **Feed and Blanketing.** The feeding and blanketing of an animal is under the direction of the owner or manager, subject to the following conditions. No condiments, condition powders, tonics, or drugs may be given any cow; and no other liquid than pure water may be given as a drink. This precludes the use of powdered milk. Dry foods may be softened with water or molasses, but no other liquid. Nothing in this rule shall be taken as forbidding proper medical attendance either by a regularly qualified veterinarian or by the person in charge. In such case the owner of the cow or the person in charge shall make statement in writing over his signature and affidavit describing the condition of the cow and reporting all medicine given, which statement shall also be signed by the veterinarian, if one be called. The supervisor, if present, shall likewise sign the statement, indicating that to his best knowledge and belief the facts stated are true and that he approved of the treatment. Nothing in this rule shall be construed to authorize or permit undue blanketing or sweating, external applications, or giving or injecting any drugs, stimulants, medicine, or any substance or thing that would produce an abnormal condition, fever, or excitement in the cow, or any condition inconsistent with normal dairy husbandry.

5. **Refusing Records.** The officers and directors of a breed association have the right to refuse or expunge any record made in their association whenever they feel that sufficient evidence is present that such record is erroneous and fraudulent.

6. **Re-Entry.** Any animal of any breed may be re-entered for another record as often as she may make her new requirements, all conditions of such test having been fulfilled.

7. **Tattooing and Marking.** This applies to Jerseys only. For the purpose of identification, every cow placed upon test must, previous to beginning, be tattooed in the ear with a distinguishing mark or number, which must be reported to the club and supervising institution.

8. **Starting a test.** The following minimum conditions must be met in recording first milk weights and starting of first official test days. Day of calving is considered as first day.

A. **Yearly Records.**

Ayrshire. *Milk weights,* as soon as practicable after calving. It is left to owner's choice.
First test, same as milk weights.

Brown Swiss. *Milk weights,* fourth day after calving.
First test, the same.

Guernsey. *Milk weights,* as soon as practicable.
First test, not earlier than seventh day after calving.

Holstein. *Milk weights,* fourth day after calving.
First test, sixth day after calving.

Jersey. *Milk weights,* fourth day after calving.
First test, the same.

Shorthorn. *Milk weights,* fourth day after calving.
First test, the same.

B. **Seven-Day Holstein Tests.**

First weights, if animal is to be placed on yearly test as well, the fourth day after calving. If not to be placed on yearly test, then the same as first test.
First test, not earlier than seventh day after calving. Preliminary milking may be made the last milking of the sixth day.

9. **Single Letter Classes.** The following are the requirements for entry into the Advanced Registry, Register of Merit, Register of Production, etc., on a 365-day test unless otherwise specified.

Ayrshire

Fat.

2 years of age or less, 250.5 pounds.
5 years of age or over, 360.0 pounds.
Daily increase between above ages one-tenth (.1) pound.

Milk.

2 years of age or less, 6000 pounds.
5 years of age or over, 9000 pounds.
Each half year of age increases milk requirement 500 lbs.

Brown Swiss

2 years, 6 months of age or less, 250.5 pounds.
5 years, 6 months of age or over, 360.0 pounds.
Daily increase between above ages one-tenth (.1) pound.

Guernsey

2 years of age or less, 250.5 pounds.
5 years of age or over, 360.0 pounds.
Daily increase between above ages one-tenth (.1) pound.

Holstein—Fat

I. **Seven-Day Tests**

A. For Certificate of Advanced Registry*

2 years of age or less, 10.0 pounds.
5 years of age or over, 16.0 pounds.
Daily increase between above ages, .00548 pounds.

(This brings the increased requirements to 2.0 pounds fat per year.)

B. For Certificate of Merit.* Animals meeting the following requirements will be issued a Certificate of Merit but NOT a Certificate of Advanced Registry.

2 years of age or less, 7.2 pounds.
5 years of age or over, 12.0 pounds.
Daily increase between above ages, .00439 pounds.

(This brings the increased requirements to 1.6 pounds fat per year.)

II. **Yearly or Semi-Official Tests**

A. For Certificates of Advanced Registry*

2 years of age or less, 318.0 pounds.
5 years of age or over, 480.0 pounds.
Daily increase between above ages, .1479 pounds.

(This brings the increased requirements to 54 pounds fat per year.)

Subdivision A. Breeder's Subdivision. Fat requirements as above. Number of milkings per day not limited.

Subdivision B. Dairyman's Subdivision. Fat requirements as above. Cow must NOT be milked more than twice per day, however, after 45 days' milk weights have been recorded.

B. For Certificate of Merit.* Animals meeting the following requirements will be issued a Certificate of Merit but NOT a Certificate of Advanced Registry. This certificate does not apply to daughters to be credited to A. R. sires.

2 years of age or less, 250.5 pounds.
5 years of age or over, 360.0 pounds.
Daily increase between above ages one-tenth (.1) pound fat.

Jersey

Class A.

I. Tests not exceeding 305 consecutive days

2 years of age or less, 250.5 pounds fat.
5 years of age or over, 360.0 pounds fat.
Daily increase between above ages, one-tenth (.1) pound fat.

* These requirements became effective April 1, 1923.

II. Tests exceeding 305 but not exceeding 365 consecutive days.
2 years of age or less 290.5 pounds fat.
5 years of age or over 400.0 pounds fat.
Daily increase between above ages, one-tenth (.1) pound fat.

Shorthorn

A. American Milking Shorthorn Breeders' Association.

I. **Seven-Day Tests.**

	Milk lbs.	*Fat lbs.*
2 years of age or less	175	6.3
3 years of age	210	7.5
4 years of age	245	8.8
5 years of age or over	280	10.0

No daily increases given.

II. **Yearly or Semi-Official Tests**

	Milk lbs.	*Fat lbs.*
2 years of age or less	5000	180
3 years of age	6000	..
4 years of age	7000	.
5 years of age or over	8000	285

No daily increases given.

B. American Shorthorn Breeders' Association.

	Milk lbs.	*Fat lbs.*
2 years, 6 months of age or less	5250	210
5 years of age or over	8000	300

Daily increase between above ages, milk 3.0 pounds; fat, one-tenth (.1) pound.

10. **Double Letter Classes.** The following breeds have special requirements when the animal is to be entered for a record with reproduction as a determining factor.

Ayrshire. (Roll of Honor). Animal to meet 365-day requirements in 300 days and in addition carry a living calf 180 of these 300 days.

Brown Swiss

I. Must drop a living calf within 14 months of previous calving and make the following requirements in 305 consecutive days.

2 years, 6 months of age or less, 220.5 pounds.
5 years, 6 months of age or over, 330.0 pounds.
Daily increase between above ages, one-tenth (.1) pound.

II. **Farmer's Class.** Must meet the above requirements for both fat production and calving and in addition the following stipulations have been adopted.

A. No Certificate of Production will be issued any cow failing to meet calving requirement.

B. After fifteenth day of test, no cow entered in this class may be eligible for entry to either 305- or 365-day tests.

C. Cow shall not be milked more than three times a day for the first fifteen days from the beginning of test, and not more than twice a day thereafter, unless the supervisor arrives on the fifteenth day after the cow has been milked three times a day, in which case it may be continued for twenty-four hours more.

D. Test periods shall be for twenty-four hours instead of forty-eight hours; a one-day test.

Guernsey

I. Must meet 365-day requirement and in addition carry a living calf 265 days of these 365 days.

II. **Farmer's Class.** Must meet 365-day requirements in 305 days and in addition meet the following stipulations.

A. Record to be made in one lactation period.
B. Record to start within 30 days after freshening, counting day following calving as the first day.
C. Not milked more than twice in twenty-four hours.
D. Give proof of carrying calf 205 days.
E. Dates of service to be given on monthly milk blank.
F. If owner desires to extend record to meet single or double letter classes, notice to be given not later than 305th day of test.

Holstein

A. For Certificate of Advanced Registry. Must drop a living calf within 14 months of last calving and make 85 percent of the fat requirements for the 365-day test in 305 days. (For 365-day fat requirements see Holstein requirements under Single Letter Classes.)

Subdivisions A and B. The same conditions must be met as in the Single Letter Classes.

B. For Certificate of Merit. Animals meeting the following requirements will be issued a Certificate of Merit but NOT a Certificate of Advanced Registry. Must drop a living calf within 14 months of last calving in addition to the following fat requirements.

2 years of age or less, 220.5 pounds.
5 years of age or over, 330.0 pounds.
Daily increase between above ages, one-tenth (.1) pound.

Jersey

Class AAA. Must drop a living calf within fourteen months of previous calving and make the following fat requirements in 305 consecutive days.

2 years of age or less, 250.5 pounds.
5 years of age or over, 360.0 pounds.
Daily increase between above ages, one-tenth (.1) pound.

Class AA. Must drop a living calf within sixteen months of previous calving and make the following fat requirements in 365 consecutive days.

2 years of age or less, 290.5 pounds.
5 years of age or over, 400.0 pounds.
Daily increase between above ages, one-tenth (.1) pound.

11. **Number of Yearly Records Allowable in One Lactation**

Ayrshire. Animal may be entered in both 300- and 365-day classes if requirements for both classes are met. Record may be extended to 400 days from original date of starting and choose 300 consecutive days, 365 consecutive days, or both from the 400 days. In case of a double record being chosen, a $1 fee is charged for second certificate. No overlapping of two lactation periods is allowable.

Brown Swiss. Animals are not entered in both 305- and 365-day records in the same lactation. If an owner desires to extend a 305-day record to a 365-day record and the animal meets the requirements in both classes, the owner must choose for which length of test he desires the animal entered. A record may be extended beyond 305 days or 365 days and the best 305 or 365 consecutive days chosen. In

the case of a 365-day record a new record may be started immediately at the close of the previous record and continued for 365 days, inclusive of any dry period.

Guernsey. Animals are not entered in both single and double letter classes in same lactation, except where an animal has made a record entitling her to class leadership. A cow is not credited in both Farmer's Class and Double Letter Class. Records may cover any 365-consecutive-days period. A new record may be started immediately at the close of previous record. Three-hundred-and-sixty-five-day records include any dry or calving period.

Holstein. Animal may be entered in both 305- and 365-day record providing all requirements for both test periods are met. Milk weights for both records must start with the same milking. It is not allowable to extend any test period beyond 365 days from beginning of first monthly official test period. No overlapping of two lactation periods is allowable.

Jersey. Animal is not allowed to be entered in both 305- and 365-day classes—one or the other class must be chosen. Owner may extend date of starting record by writing on last production report, "Starting date of record changed to ....." Milk weights may be reported up to and including 400 days from start of test and from this any 305- or 365-consecutive-days period may be selected by indicating to the Cattle Club on last production report the dates and length of test desired. No overlapping of two lactation periods is allowable.

Shorthorn. A record may be extended beyond the 365 days and the best consecutive 365 days chosen. Record to include any dry or calving period.

12. **Figuring Ages.** Each breed has its own method of figuring the age of its animals. Below is the method used by each breed. Example used: Animal born May 15, 1919; calved November 25, 1922; started record November 29, 1922.

Ayrshire. Age figured from date of birth to date of starting record. Figured in similar manner to that used in a simple interest problem, considering 30 days to the month.

1922-11-29
1919- 5-15
3- 6-14

Age: 3 years, 6 months, 14 days. This reduced to years and days gives 3 years, 197 days, making the animal a senior three year old.

When an animal is six months of age or over, in reducing the six months to days, consider six months as 183 days and add the remaining days on the basis of 30 days to a month. *Example.* 8 months, 17 days would be reduced as follows: 6 months, 183 days; *plus* 2 additional months at 30 days each, or 60 days; *plus* the 17 days—a total of 260 days.

Brown Swiss. Age figured from date of birth to date of starting record. Figured as in simple interest problems, considering 30 days to the month.

1922-11-29
1919- 5-15
3- 6-14

Age: 3 years, 6 months, 14 days; or, reduced to years and days, 3 years, 194 days.

Guernsey. Age figured from date of birth to date of starting record. Figured in years and exact days.

1922-11-29
1919- 5-15
3-

Age: 3 years on May 15, 1922, plus exact days from May 15 to and excluding November 29. There are then 16 days remaining in May; 30 in June; 31 in July; 31 in August; 30 in September; 31 in October; and 28 in November—or a total of 197 days. The Guernsey Cattle Club does NOT include the date of birth and date of starting record. In example used, they omit May 15 and November 29. Therefore, age is 3 years, 197 days.

Holstein. Age figured from date of birth to date of calving. Figured as in simple interest problems. Consider 30 days to the month.

1922-11-25
1919- 5-15
3- 6-10

Age: 3 years, 6 months, 10 days; or, if reduced to years and days, 3 years, 190 days.

Jersey. Age figured from date of birth to date of starting record. Figured in years and exact days.

1922-11-29
1919- 5-15
3-

Age: 3 years old on May 15, 1922, plus exact days from May 15 to and including November 29. There are then 16 days remaining in May; 30 in June; 31 in July; 31 in August; 30 in September; 31 in October and 29 in November or a total of 198 days. The Jersey Cattle Club does NOT include date of birth but DOES include date of starting record. In example used, they omit May 15 but include November 29. Therefore, age is 3 years, 198 days.

Shorthorn Associations. Age figured the same as with the Brown Swiss.

13. **Eligibility of Bulls.** The following are the requirements for entry of bulls into the Advanced Registry, Register of Merit, etc. All bulls are to be previously recorded in the Breed Herd books.

Ayrshire. Four daughters in A. R. from different dams.
Brown Swiss. Three daughters in A. R. from different dams.
Guernsey. Two daughters in A. R.
Holstein. Four daughters in A. R. O. or A. R. S. O.
Jersey. Three daughters in R. of M. from different dams.

14. **Omission of Monthly Test.** In the case of cows freshening after, or finishing their tests before, any regular visit of the supervisor, the results of the test made at his succeeding visit, in the first case, and of the test made at his previous visit, in the latter, shall be used in determining the fat to be credited for such portions of monthly period.

15. **Number of Milkings During Test Period.** The number of milkings daily of a cow on test is optional with the owner thereof, but during the two days of monthly official supervision must not differ from the number ordinarily in use.

16. **Classification of Records.** This is not uniform. Ordinarily the following classification is used:

Class A or AA, Mature Form, 5 years of age or over.
Class B or BB, Senior four year old, 4½ to 5 years of age.
Class C or CC, Junior four year old, 4 to 4½ years of age.
Class D or DD, Senior three year old, 3½ to 4 years of age.
Class E or EE, Junior three year old, 3 to 3½ years of age.
Class F or FF, Senior two year old, 2½ to 3 years of age.
Class G or GG, Junior two year old, 2 to 2½ years of age.
Senior yearling, under 2 years of age.

Note: Senior Form for Ayrshires is computed with 6 months counted as 183 days.

17. **Application and Certificate Fees.** The following fees are required by the various Cattle Clubs and Associations.

Ayrshire. Entry fee of $3 for each female to accompany application to test. Additional fee of $2 at close of test for certificate.
Non-member. Above fees doubled.
Roll of Honor. Animals meeting the Roll of Honor requirements are charged an additional $1.
Bulls. Fee of $5.

Brown Swiss. Entry fee of $5 for each female to accompany application to test.

Guernsey. Females: Fee of $10 to accompany application to test. Additional fee of $5, payable at completion of test.
Male: Certificate fee of $2.50.

Holstein. Fee of $2 to accompany first application for permission to test in each testing year, which year begins April 1. This fee entitles the breeder to a copy of the Blue Book for that year.

Jersey. Fee of $5 to accompany application to test (first monthly milk weight report, Form 61).

Shorthorn. Fee for publishing record $2; Certificate of Merit fee, 50 cents additional.

18. **Scheme of Jersey Awards.** This applies to the Jersey records only. The following awards in Classes I, II, III, IV, and V will be made annually to all cows admitted to the Register of Merit in Classes AAA and AA for the production of the amounts of butter-fat hereinafter stated, in tests that are finished in each calendar year and fully reported to the Club on or before the fifteenth day of May of the year following.

Class I. Cows of any age (Gold Medal, Medal of Merit, President's Cup)

1. The A. J. C. C. Gold Medal shall be awarded to all cows admitted to the Register of Merit in Class AAA or Class AA which shall have produced butter-fat as follows:
In Class AAA, 610 pounds and less than 740 pounds.
In Class AA, 700 pounds and less than 850 pounds.

2. The A. J. C. C. Medal of Merit shall be awarded to all cows admitted to the Register of Merit in Class AAA or Class AA which shall have produced butter-fat as follows:
In Class AAA, 740 pounds or in excess thereof.
In Class AA, 850 pounds or in excess thereof.

3. The President's Cup shall be awarded to the cow admitted to the Register of Merit in either Class AAA or Class AA which shall have produced proportionately the greatest amount of butter-fat; provided, however, that the amount of butter-fat produced shall equal or exceed, if in Class AAA, 870 pounds; or, if in Class AA, 1000 pounds. The cow awarded the President's Cup shall be known as the "National Register of Merit Champion" for the year in which the test was completed.

If in any year there shall be no cow with a production record meriting the award of the President's Cup, then the cow admitted to the Register of Merit in either Class AAA or Class AA producing the proportionally greatest amount of butter-fat shall be known as the "Champion Register of Merit Cow" for the year in which her test was completed.

Class II. Cows Under Five Years of Age on the Day of Beginning Test (Silver Medal)

The A. J. C. C. Silver Medal shall be awarded to all cows under five years of age on the day of beginning test, admitted to the Regis-

ter of Merit in Class AAA or Class AA, which shall have produced butter-fat in amount, varying with age on the day of beginning test, as follows:

Class AAA. If on day of beginning of test 2 years and 95 days old or younger, 410 pounds; and for each day older than 2 years and 95 days, two-tenths (.2) pound, additional.

Class AA. If on day of beginning of test 2 years and 95 days old or younger, 500 pounds; and for each day older than 2 years and 95 days, two-tenths (.2) pound, additional.

Class III. National Class Championships

The cows admitted to the Register of Merit in both Classes AAA and AA which have produced the most butter-fat in any of the following subclasses, shall both be awarded A. J. C. C. National Class Championship Certificates and shall be known as National Class Champions of their sub-classes and Register of Merit classes respectively for the year in which their tests are completed.

Sub-class A, Junior two year old (under 2½ years at beginning of test).
Sub-class B, Senior two year old (2½ and under 3 years at beginning of test).
Sub-class C, Junior three year old (3 and under 3½ years at beginning of test).
Sub-class D, Senior three year old (3½ and under 4 years at beginning of test).
Sub-class E, Junior four year old (4 and under 4½ years at beginning of test).
Sub-class F, Senior four year old (4½ and under 5 years at beginning of test).
Sub-class G, Aged cow (5 years and over at beginning of test).

Class IV. State Class Championships

The cows in each state of the United States admitted to the Register of Merit, in both class AAA and Class AA, which shall have produced the most butter-fat in any of the sub-classes as set forth under Class III above, shall be awarded A. J. C. C. State Class Championship Certificates and be known as the State Class Champions of their respective sub-classes and Register of Merit Classes of the states wherein their tests were begun and for the year in which completed.

Class V. State Championships

The cows in each state of the United States admitted to the Register of Merit in both Class AAA and Class AA which shall have produced the most butter-fat shall be awarded A. J. C. C. State Championship Certificates and be known as Champions of their respective Register of Merit Classes of the states wherein their tests were begun and for the year in which completed.

Class VI. Gold Medal Bulls

Every bull which has sired three or more daughters out of different dams, which have been admitted to the Register of Merit in either Class AAA or Class AA, which have produced at any age the amount of butter-fat required for the award of a Gold Medal in Class I of this Scheme of Awards shall be awarded an A. J. C. C. Gold Medal.

Class VII. Silver Medal Bulls

Every bull which has sired three or more daughters, out of different dams, which have been admitted to the Register of Merit in either Class AAA or Class AA, and which have produced, in tests begun at ages under five (5) years, the amount of butter-fat required for the award of the Silver Medal in Class II of this Scheme of Awards, shall be awarded an A. J. C. C. Silver Medal.

Class VIII. Medal of Merit Bulls

Every bull which has sired three or more daughters out of different dams, which have been admitted to the Register of Merit in either Class AAA or Class AA, which have produced at any age the amount of butter-fat required for the award of a Medal of Merit in Class I of this Scheme shall be awarded an A. J. C. C. Medal of Merit.

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